

**BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA**

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APPLICATION TO CHANGE WATER RIGHT) NO. 40C 30155439 BY MONTANA STATE) BOARD OF LAND COMMISSIONERS)	PRELIMINARY DETERMINATION TO GRANT CHANGE
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On April 21st, 2022, the Montana State Board of Land Commissioners (Applicant) submitted Application to Change Water Right No. 40C 30155439 to change Water Right Claim No. 40C 215290-00 to the Lewistown Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website. The Department sent the Applicant a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated August 10th, 2022. The Applicant provided information in the form of handwritten notes to the Department on September 7th, 2022. The Applicant met with the Department to discuss their Deficiency Response on September 7th, 2022. The Application was determined to be correct and complete as of November 17th, 2022. An Environmental Assessment for this Application was completed on November 17th, 2022.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application to Change an Existing Irrigation Water Right, Form 606-IR
 - Maps of existing and proposed project
 - Supplemental answers to questions
- Map created by the Applicant showing historic use the location of the current Point of Diversion and the new proposed pump site
- Ditch measurements and pump specifications

Information Received after Application Filed

- Deficiency response to Department Deficiency Letter, dated September 7, 2022

Information within the Department's Possession/Knowledge

- Musselshell River surface water right information
- Department Deficiency Letter, sent August 10, 2022
- 1948 Musselshell County Water Resources Survey materials including field notes
- USDA aerial photograph no. 178-224, dated 09/19/1979
- Undated U.S. Geological Survey topographic maps and aerial photos
- DNRC Map created for Change Application 40C 30153043 showing the original Goffena Pump Ditch point of diversion (or POD) and ditch, the Krueger-Spendiff Ditch POD and ditch, the proposed POD/pump site and pipeline, a scale bar and a north arrow
- Department Technical Report dated November 17, 2022
- Environmental Assessment dated November 17, 2022

The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Lewistown Regional Office at 406-538-7459 to request copies of these documents.

- Department Memorandum - Development of Standardized Methodologies to Determine Historic Diverted Volume, September 13, 2012.
- Assessment of New Consumptive use and Irrecoverable Losses Associated with Change Applications Memorandum, April 15, 2013

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, part 4, MCA).

WATER RIGHT TO BE CHANGED

FINDINGS OF FACT

1. The Applicant is Montana State Board of Land Commissioners and the ownership listed on the property/place of use listed on Statement of Claim (Claim) 40C 215290-00 as found on Montana Cadastral is DNRC School Trust Land. According to Trust Lands Division Hydrologist Dennis Meyer in an email dated February 13, 2023, these entities are the same entity.
2. Claim 40C 215290-00 is being changed in this application. This water right lists both the Goffena Pump and Krueger-Spendiff Ditches as means of conveyance. The Goffena Pump Ditch and Krueger-Spendiff Ditch points of diversion are located approximately 550 feet apart in the

Government Lot 3 in the W2 of Section 1, Township (T) 8 North (N) Range (R) 27 East (E) in Musselshell County. In the application materials, the Applicant explains that the Goffena Pump Ditch was exclusively used until 2005, when the portion of the Applicant's property containing the Goffena Pump Ditch was sold; the Department found this assertion to be substantial and credible in FOF No. 7 in the Preliminary Determination to Grant Change Application No. 40C 30153043 to change Claim 40C 204985-00, which also lists the Goffena Pump Ditch as a means of conveyance. Since 2005, the place of use has been exclusively irrigated with water diverted into the Krueger Spendiff Ditch and then pumped from the ditch to the gated pipe irrigation system. The Applicant's exclusive historical use of the Goffena Pump Ditch is supported by the Musselshell County Water Resource Survey and was substantiated in the PD to Grant Change Application No. 40C 30153043.

3. Claim 40C 215290-00 lists a flow rate of 2.01 CFS and an unquantified diverted volume from the Musselshell River for the purpose of flood irrigation with a priority date of June 30, 1973. The period of use and the period of diversion are both March 15 to October 15. The claimed place of use is 53 acres located in SW Section 36, Township (T) 9N, Range (R) 27E in Musselshell County. The place of use is generally located 13 miles NE of Roundup, Montana near US Highway 12 E. This water right was included in the Preliminary Decree issued for Basin 40C on June 7, 2017. The claimed elements of the water right being changed are summarized in Table 1.

Table 1. Water right proposed for change

WR NO.	FLOW RATE	VOLUME	PURPOSE	PERIOD OF USE	PLACE OF USE	POINT(S) OF DIVERSION	PRIORITY DATE
40C 215290-00	2.01 CFS	Hist/Ben Use (Unquantified)	Irrigation	March 15 – October 15	SW Sec 36, T9N R27E	Goffena Pump Ditch, Krueger- Spendiff Ditch, Gov't Lot 3, W2, Sec 1, T8N R27E, Musselshell County	June 30, 1973

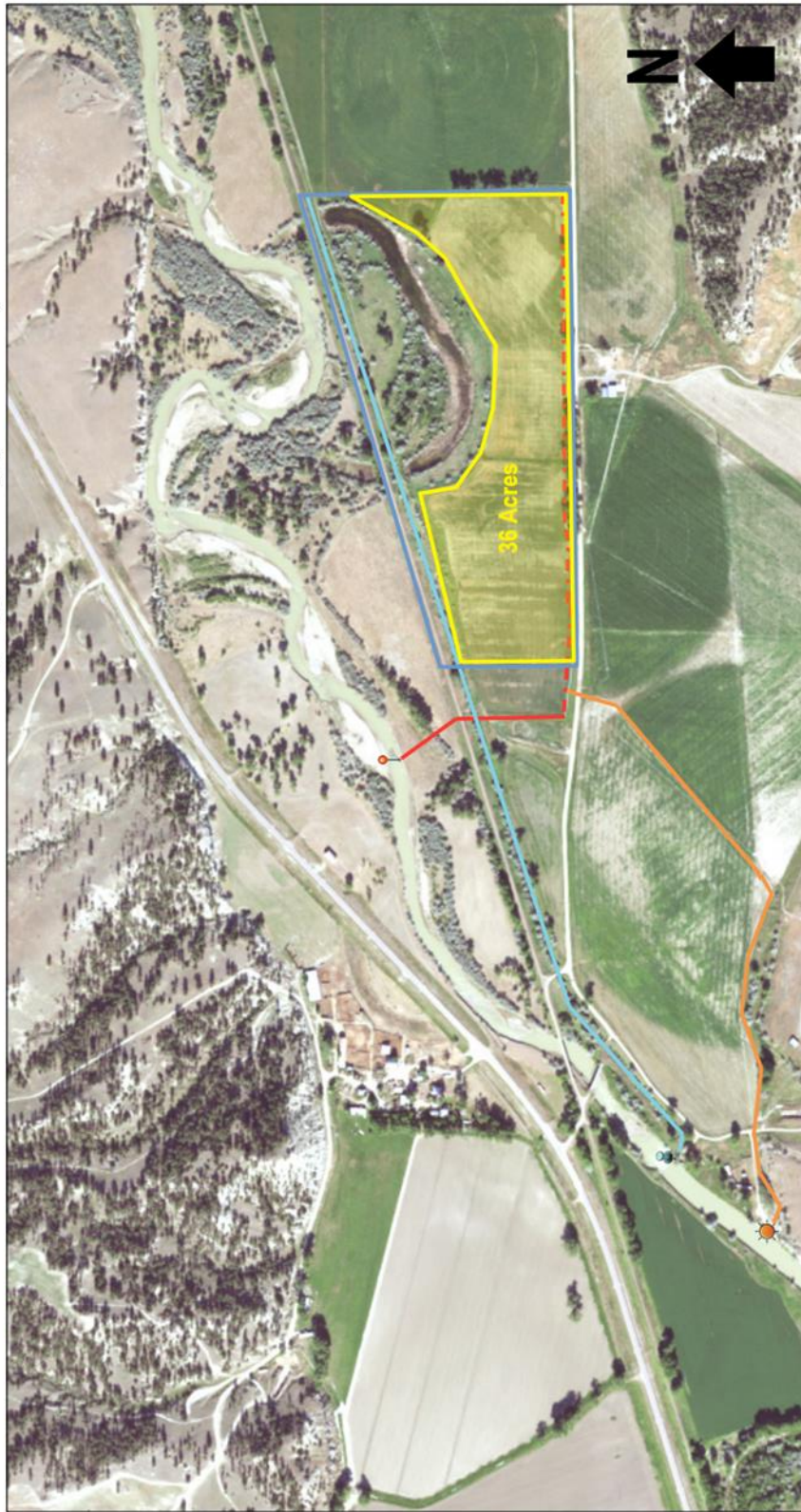
CHANGE PROPOSAL

FINDINGS OF FACT

4. The Applicant proposes to change the point of diversion from the Goffena Pump Ditch to a new pump site in the NESESE of Section 35, T9N R27E. After this change the Applicant will retire use of the Krueger-Spendiff and Goffena Pump Ditches and use a 500', 15-inch diameter pipeline to convey water from the proposed pump site to the place of use. Diverted flood water

will then be applied to the field using a gated pipe irrigation system. The place of use and amount of water diverted are not proposed to be changed. The map below shows the elements of this proposed change.

Montana State Board of Land Commissioners Change Application Map (40C 30155439)



10/26/2022, 11:16:14 AM

MSBLC Property

Goffena Ditch POD

Krueger-Spendiff Ditch POD

Proposed POD

Irrigated Acres

Goffena Ditch

Krueger-Spendiff Ditch

Proposed Pipeline

Gated-pipe

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., Intermap, USGS, METI, NASA, EPA, USDA

Web AppBuilder for ArcGIS

CHANGE CRITERIA

5. The Department is authorized to approve a change if the applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. Matter of Royston, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an applicant's burden to prove change criteria by a preponderance of evidence is "more probably than not."); Town of Manhattan v. DNRC, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in §85-2-402(2), MCA, are:

(2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:

(a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.

(b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

(c) The proposed use of water is a beneficial use.

(d) The applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

6. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Hohenlohe, at ¶¶ 29-31; Town of Manhattan, at ¶8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

HISTORIC USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historic Use

7. Claim 40C 215290-00 lists both the Goffena Pump and Kruger-Spendiff Ditches as means of conveyance. According to the Applicant and as substantiated in FOF No. 2 above, the Goffena Pump Ditch was used exclusively until 2005 when the property with the ditch on it sold, at which point the Applicant used the Kruger-Spendiff Ditch only. Because the Goffena Pump Ditch was exclusively used before 2005 and the Kruger-Spendiff Ditch was exclusively used since 2005, the Department will only assess historic use for the Goffena Pump Ditch.

8. The Department's review of the Musselshell County Water Resources Survey from 1949 supports historical irrigation of 40 acres. Claim 40C 215290-00 has a priority date of June 30, 1973 because this claim was filed late. The Musselshell County USDA Photograph 178-224 from 1979 and the Department's original adjudication examination report both show 45.8 acres of irrigated land on this parcel. In maps and 1979 aerial photos provided for Section 2 of Form 606-IR, the Applicant stated that a maximum of 36 acres were ever historically irrigated on the place of use. Based on this information the Department finds the extent of the historical irrigation place of use to be 36 acres.

9. The historically consumed volume for this water right was quantified pursuant to the methods outlined in ARM 36.12.1902(16) as elected by the Applicant. The place of use is located in Climate Area 1 (high consumptive use). Historically, the place of use was used to grow alfalfa. The 50% 1964-1973 management factor for Musselshell County was applied to the Melstone weather station flood evapotranspiration water requirement of 24.22 inches. Respective historical irrecoverable loss and on-farm efficiency percentages of 5% and 25% for flood irrigation were considered. Based on this information the Department finds the historical consumed and field application volumes for the water right being changed to be 43.6 acre-feet (AF) and 145.3 AF, respectively. The volume of water historically consumed during irrigation of the Applicant's historical place of use, including irrecoverable losses, and other variables used in the Department's calculation, are summarized in Table 2.

Table 2. Historic consumed volume (HCV) and field application volume for the historical wild flood place of use

Musselshell County Flood ET (Inches)	Musselshell County 1964-1973 Management Factor (Percent)	Historic Acres	HCV AF (minus IL)	On-farm Efficiency	Field Application AF	Historic Irrecoverable Losses (IL) Flood 5%:	HCV AF (Including IL)
24.22	50.0%	36	36.3	25%	145.3	7.3	43.6

10. The historical diverted volume was quantified pursuant to the standard methods in ARM 36.12.1902(10). Water was historically diverted three times per year (once between April and June, once between June and July, and once between July and October, weather permitting) for up to 10 days at a time, a total of 30 days per year from the Goffena Pump Ditch. The Applicant provided information indicating the length of the Goffena Pump Ditch to be 3,466 feet from the POD, the width to be 3 feet, and the wetted perimeter to be 5.5 feet.

11. The NRCS Web Soil Survey characterizes soils below the flow levels of the Goffena Pump Ditch to be Havre Loam Soil with characteristics of loam and sandy loam. This corresponds with a ditch loss rate to be of 1.2 ft³/ft²/day. The Department used information from Potts to determine the annual evapotranspiration as 24.22 inches. The Department considered an on-farm efficiency value for flood irrigation to be 25%.

12. There are four water rights with a combined total flow rate of 26.52 CFS that historically used the Goffena Pump Ditch as a historical means of conveyance, including the water right being changed. Claim 40C 215290-00 being changed in this application lists a flow rate of 2.01 CFS, Claim 40C 201654-00 lists a flow rate of 11.14 CFS, and Claim 40C 201651-00 lists a flow rate of 6.68 CFS. Claim 40C 204985-00 lists a flow rate of 11.14 CFS, however, per FOF 9 in the PD to Change Application 40C 30153043, the Applicant provided information which the Department found supported a maximum historical flow rate of 3,000 GPM or 6.69 CFS. The Applicant stated that historically the ditch was of sufficient capacity to convey all four water rights together.

13. Because the Applicant is the first user on the Goffena Pump Ditch (3,466 feet from POD), the Department will only assess historical conveyance losses for the first 3,466 feet of the ditch. The Applicant's portion of the conveyance loss is calculated based on the Applicant's portion of the flow rate, where 2.01 CFS comprises 7.6% of the total flow in the Goffena Pump Ditch.

14. The annual amount of ditch evaporation as recorded at the Melstone weather station is 3.47 inches (Potts, 1988), with a period-adjusted evaporation of 0.5 inches for 30 total days of diversion with the water right being changed. Based on this information, the Department finds the historic diverted conveyance loss volume for the Goffena Pump Ditch during this period of time to be 23.7 AF. The Applicant's portion of this conveyance loss calculated above is 7.6%, or 1.8 AF. The variables considered in the Department's assessment of historic conveyance losses are shown in Table 3.

Table 3. Historic conveyance losses for Krueger-Spendiff Ditch

Historic Diverted Volume (HDV)	HCV AF (<i>minus IL</i>)	On-farm Efficiency	Seasonal Conveyance Loss Volume (seepage loss + vegetation loss + ditch evaporation)		
	36.3	25%	23.7		
<i>Seepage Loss:</i>	Ditch Wetted Perimeter (Feet)	Ditch Length (Feet)	Ditch Loss Rate (ft ³ /ft ² /day)	Days Irrigated	Seepage Loss (/43560)
	5.5	3466	1.2	30	15.8
<i>Vegetation Loss:</i>	% loss/mile	Est. Flow Rate (CFS)=	Days Irrigated	ditch length (miles)	Vegetation Loss (*2)
	0.0075	26.52	30	0.7	7.8
<i>Ditch Evaporation:</i>	Ditch Width (Feet)	Ditch Length (Feet)	Annual Evaporation (Potts)	Period Adjusted Evaporation	Ditch Evaporation (/43560)
	3	3466	3.47	0.50	0.1

15. Per ARM 36.12.1902(10), historical diverted volume is equal to the sum of the field application volume and the volume of conveyance losses. The Department finds the total historical diverted volume of Claim 40C 215290-00 is 169.0 AF. The total historical use assessed for the water right being changed is shown in Table 4.

Table 4. Historic Use for Water Right 40C 215290-00

WR Claim #	Maximum Flow Rate	Historic Diverted Volume	Historic Consumed Volume	Purpose	Total Acres
40C 215290-00	2.01 CFS	169.0 AF	43.6 AF	Irrigation	36.0 Acres

FINDINGS OF FACT – Adverse Effect

16. The Applicant is proposing to change the point of diversion of Claim 40C 215290-00 in this application; the place of use and purpose are not changing. The new point of diversion will consist of a pump site in the NESESE of Section 35, T9N R27E in Musselshell County. A 500', 15-inch diameter pipeline will be used to convey water from the new pump site to the 36-acre place of use. The new pump will have a capacity of 2.45 CFS, and the maximum flow rate and volume of water that will be diverted with the water right being changed is 2.01 CFS and 43.6 AF. Water will be applied to the 36-acre place of use using a gated pipe flood irrigation system. The Applicant proposes to retire use of both the Goffena Pump and Krueger-Spendiff Ditches after this change.

17. After this change, Claim 40C 215290-00 will be associated with Claim 40C 204985-00, which will also be using the new pump site to divert 2.45 CFS and 11.1 AF for the irrigation of 4 acres. The maximum flow rate that will be diverted at this point of diversion with both of these water rights is equal to the 2.45-CFS capacity of the new pump.

18. The Applicant will use a McCrometer flow meter to measure the diverted flow rate and ensure the amount of water diverted after this change does not exceed the historically diverted volume of 169.0 AF. The pump can be immediately shut off in case call is made on this water right by downstream senior appropriators. Furthermore, the Applicant will be required to follow the law of priorities on the stream by complying with distribution as directed by water commissioners under District Court order.

19. This authorization as granted will be subject to the following measurement condition:

The Appropriator shall install a measuring device in the conveyance facility as near as practical to the pump site, in order to measure appropriations. The type and location of the device must be approved by the Department. The Appropriator shall keep a written record of the flow rate and volume of water diverted, including the period of time of diversion. Records must account separately for any appropriations under this authorization from appropriations under any other water right using the same diversion works and conveyance facility. Records shall be submitted by December 31 of each year and upon request at other times during the year. Failure to submit reports as required by these conditions may be cause for revocation of the change. The records must be sent to the Lewistown Water Resources Regional Office. The Appropriator shall maintain

the measuring/monitoring device so it always operates properly and measures flow rate accurately during periods of appropriation.

20. *Diverted & Consumed Volume* – The Department calculated the historic volume using ARM 36.12.1902 and standard methodology. The proposed system with the new pipeline will result in no seepage loss, vegetation loss, or ditch evaporation en route from the POD to the POU as calculated via ARM 36.12.1902. As a result of this, the post change diverted volume will be the same as the historic field applied volume of 145.3 AF.

21. The following water right is considered for adverse effect because it shares the historic point of diversion.

Water Right Number	Owners	Priority Date	Purpose	Flow Rate (CFS)
40C 23799-00	Mark C. Rutledge	July 24, 1979	Irrigation	0.89

22. Under the Applicant's proposal, less water will be diverted from the source than was historically diverted under the pre-1973 flood irrigation system and no more water will be consumed than was historically consumed. Water not diverted by the pump and gated pipe irrigation will remain instream and be available for appropriation by other water users.

23. As part of its plan to prevent adverse effects, the Applicant will measure appropriations and comply with the District Court enforced water distribution project on the Musselshell River. Accordingly, the Department imposes a water measurement and reporting condition as part of this Preliminary Determination.

24. Under the conditions set forth in this preliminary determination, the Department finds the proposed change will not adversely affect the use of existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued.

BENEFICIAL USE

FINDINGS OF FACT

25. The Applicant proposes to use water for irrigation of agricultural crops with Claim 40C 215290-00 after this change. Irrigation is identified as a beneficial use in § 85-2-102(4)(a), MCA.

26. System specifications for the proposed appropriation were provided by the Applicant and include a maximum pump capacity of 2.45 CFS. The volume that will be diverted for the continued irrigation of 36 acres with a gated-pipe system will not exceed of 43.6 AF. The proposed diverted flow rate of 2.01 CFS is required to deliver the post-change diverted volume of 43.6 AF to the 36-acre place of use. The proposed diverted volume of 43.6 AF for 36 acres, or 1.21 AF per acre, is based on the needs of a 50% efficient gated-pipe irrigation system in Montana per the findings made in FOF 28 and 30 in the PD to Change Application 40C 30153043.

27. After this change, Claim 40C 204985-00 will also be diverted into the same pump as Claim 40C 215290-00. The maximum flow rate and volume that will be diverted into the new point of diversion with associated Claim 40C 204985-00 is 2.45 CFS and 11.1 AF to irrigate 4 acres located to the east of the Applicant's place of use. In aggregate, the maximum flow rate of water that will be diverted into this shared point of diversion with both associated rights cannot exceed 2.45 CFS.

28. The Department finds the proposed flow rate and volume to be a beneficial use of water.

ADEQUATE DIVERSION

FINDINGS OF FACT

29. The Applicant is proposing to install a 1,100 GPM pump in the Musselshell River in the NESESE Section 35 T9N R27E and use a 500 foot, 15-inch pipeline to carry water to a 12-inch gated-pipe irrigation system for the continued irrigation of the 36-acre place of use. After this change, a maximum flow rate of 2.01 CFS and volume of 43.6 AF of water will be delivered to the place of use with Claim 40C 215290-00. There is a written agreement with High Butte Ranch to allow the pipeline to cross High Butte Ranch Property. The flow rate needed for the gated-pipe irrigation system is 2.01 CFS, which is less than the 1,100 GPM (2.45 CFS) capacity of the proposed new point of diversion and pump site.

30. Based on proposed diversionary system specifications and additional information provided in the application materials, the Department finds the proposed means of diversion, new conveyance method, and operation of the new diversion works are adequate for the proposed beneficial use of 2.01 CFS and 43.6 AF.

POSSESSORY INTEREST

FINDINGS OF FACT

31. The Applicant signed the affidavit on the application form affirming the Applicant has possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use.

32. The Applicant is Montana State Board of Land Commissioners and the ownership listed on the property as found on Montana Cadastral is DNRC School Trust Land. According to Trust Lands Hydrologist Dennis Meyer in an email dated February 13, 2023, these entities are the same entity.

CONCLUSIONS OF LAW

HISTORIC USE AND ADVERSE EFFECT

33. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. McDonald v. State, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986)(beneficial use constitutes the basis, measure, and limit of a water right); Featherman v. Hennessy, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911)(increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940)(appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924)(“quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only”); Town of Manhattan, at ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court,

Order Re Petition for Judicial Review, Pg. 9 (2011)(the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004).¹

34. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 96 P. 727, 731 (1908); Quigley, 110 Mont. at 505-11, 103 P.2d at 1072-74; Matter of Royston, 249 Mont. at 429, 816 P.2d at 1057; Hohenlohe, at ¶¶43-45.²

35. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the “historic use” of the water right being changed. Town of Manhattan, at ¶10 (recognizing that the Department’s obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.³ A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the

¹ DNRC decisions are available at:

http://www.dnrc.mt.gov/wrd/water_rts/hearing_info/hearing_orders/hearingorders.asp

² See also Holmstrom Land Co., Inc., v. Newlan Creek Water District, 185 Mont. 409, 605 P.2d 1060 (1979); Lokowich v. Helena, 46 Mont. 575, 129 P. 1063(1913); Thompson v. Harvey, 164 Mont. 133, 519 P.2d 963 (1974)(plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972)(appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909)(successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, Gassert v. Noyes, 18 Mont. 216, 44 P. 959(1896)(change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff’s subsequent right).

³A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under §85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. §85-2-234, MCA

original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. Quigley, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); Royston, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); Hohenlohe, at ¶44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9, 1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).⁴

36. An applicant must also analyze the extent to which a proposed change may alter historic

⁴ Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right ... the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right ... which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo., 1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("[Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation"); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right ... he shall file a petition requesting permission to make such a change The change ... may be allowed provided that the quantity of water transferred ... shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo., 1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. E.g., Hohenlohe, at ¶44; Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); Newton v. Weiler, 87 Mont. 164, 286 P. 133(1930); Popham v. Holloron, 84 Mont. 442, 275 P. 1099, 1102 (1929); Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909); Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731; Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; In the Matter of Application for Change Authorization No. G (W)028708-411 by Hedrich/Straugh/Ringer, DNRC Final Order (Dec. 13, 1991); In the Matter of Application for Change Authorization No. G(W)008323-G76l By Starkel/Koester, DNRC Final Order (Apr. 1, 1992); In the Matter of Application to Change a Water Right No. 41l 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004); ARM 36.12.101(56)(Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water users).⁵

37. In Royston, the Montana Supreme Court confirmed that an applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the “amount historically consumed” and the water that re-enters the stream as return flow. . . . An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable,

⁵ The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana’s water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell’s flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass’n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶ 22, 31,43(citing Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator “is entitled to have the water flow in the same manner as when he located,” and the appropriator may insist that prior appropriators do not affect adversely his rights.

This fundamental rule of Montana water law has dictated the Department’s determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.

We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

38. The Department’s rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an applicant to meet its burden of proof. ARM 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. ARM 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. ARM 36.12.1901 and 1903.

39. Applicant seeks to change existing water rights represented by its Water Right Claims. The “existing water rights” in this case are those as they existed prior to July 1, 1973, because with limited exception, no changes could have been made to those rights after that date without the Department’s approval. Analysis of adverse effect in a change to an “existing water right” requires evaluation of what the water right looked like and how it was exercised prior to July 1, 1973. In McDonald v. State, the Montana Supreme Court explained:

The foregoing cases and many others serve to illustrate that what is preserved to owners of appropriated or decreed water rights by the provision of the 1972 Constitution is what the law has always contemplated in this state as the extent of a water right: such amount of water as, by pattern of use and means of use, the owners or their predecessors put to beneficial use. . . . the Water Use Act contemplates that all water rights, regardless of prior statements or claims as to amount, must nevertheless, to be recognized, pass the test of historical, unabandoned beneficial use. . . . To that extent only the 1972 constitutional recognition of water rights is effective and will be sustained.

220 Mont. at 529, 722 P.2d at 604; see also Matter of Clark Fork River Drainage Area, 254 Mont. 11, 17, 833 P.2d 1120 (1992).

40. Water Resources Surveys were authorized by the 1939 legislature. 1939 Mont. Laws Ch. 185, § 5. Since their completion, Water Resources Surveys have been invaluable evidence in water right disputes and have long been relied on by Montana courts. In re Adjudication of Existing Rights to Use of All Water in North End Subbasin of Bitterroot River Drainage Area in Ravalli and Missoula Counties, 295 Mont. 447, 453, 984 P.2d 151, 155 (1999)(Water Resources Survey used as evidence in adjudicating of water rights); Wareing v. Schreckendgust, 280 Mont. 196, 213, 930 P.2d 37, 47 (1996)(Water Resources Survey used as evidence in a prescriptive ditch easement case); Olsen v. McQueary, 212 Mont. 173, 180, 687 P.2d 712, 716 (1984) (judicial notice taken of Water Resources Survey in water right dispute concerning branches of a creek).

41. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. E.g., In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., DNRC Proposal for Decision adopted by Final Order (2005). The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location of diversion, it is essential that the change also not enlarge an existing right. See MacDonald, 220 Mont. at 529, 722 P.2d at 604; Featherman, 43 Mont. at 316-17, 115 P. at 986; Trail's End Ranch, L.L.C. v. Colorado Div. of Water Resources 91 P.3d 1058, 1063 (Colo., 2004).

42. The Department has adopted a rule providing for the calculation of historic consumptive use where the Applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902 (16). In the alternative an Applicant may present its own evidence of historic beneficial use. In this case Applicant has elected to proceed under ARM 36.12.1902. (FOF No. 9).

43. If an Applicant seeks more than the historic consumptive use as calculated by ARM 36.12.1902 (16), the Applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. E.g., Application for Water Rights in Rio Grande County 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); In the Matter of Application to

Change Water Right No. 41H 1223599 by MGRR #1, LLC., supra; Orr v. Arapahoe Water and Sanitation Dist. 753 P.2d 1217, 1223 -1224 (Colo., 1988)(historical use of a water right could very well be less than the duty of water); Weibert v. Rothe Bros., Inc., 200 Colo. 310, 317, 618 P.2d 1367, 1371 - 1372 (Colo. 1980) (historical use could be less than the optimum utilization “duty of water”).

44. Based upon the Applicant’s evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Water Right Claim No. 40C 215290-00 of 148.1 acre-feet diverted volume and 2.01 CFS flow rate with a consumptive use of 43.6 acre-feet. (FOF No. 7-15)

45. Based upon the Applicant’s comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. § 85-2-402(2)(b), MCA. (FOF No. 16-24)

BENEFICIAL USE

46. A change applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§ 85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: “[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . .” McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under § 85-2-402, MCA, and new beneficial permits under § 85-2-311, MCA. ARM 36.12.1801. The amount of water that may be authorized for change is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, Pg. 3 (2011)(citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant’s argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900)(“The

policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes.”); § 85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).

47. The Department may issue a change authorization for less than the amount of water requested, but may not issue a change authorization for more water than is requested or more water than can be beneficially used without waste for the purpose stated in the application. § 85-2-312, MCA; see also, McDonald v. State, 220 Mont. 519, 722 P.2d 598 (1986); Toohy v. Campbell, 24 Mont. 13, 60 P. 396 (1900).

48. Applicant proposes to use water for irrigation which is a recognized beneficial use. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence irrigation is a beneficial use and that 51.9 acre-feet of diverted volume and 2.01 CFS flow rate of water requested is the amount needed to sustain the beneficial use and is within the standards set by DNRC Rule. § 85-2-402(2)(c), MCA (FOF No. 25-28)

ADEQUATE MEANS OF DIVERSION

49. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. Crowley v. 6th Judicial District Court, 108 Mont. 89, 88 P.2d 23 (1939); In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC (DNRC Final Order 2002)(information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate).

50. Pursuant to § 85-2-402 (2)(b), MCA, Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF No. 29-30)

POSSESSORY INTEREST

51. Pursuant to § 85-2-402(2)(d), MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. See also ARM 36.12.1802

52. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF No. 31-32)

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 40C 30155439 should be GRANTED subject to the following.

The Applicant may change the point of diversion of Statement of Claim No. 40C 215290-00. After this change the Applicant will no longer divert water into the historical points of diversion at the Goffena Pump and Krueger-Spendiff Ditch headgates and the new point of diversion will consist of a pump located approximately 0.7 miles downstream in the Musselshell River in the NESESE of Section 35 T9N R27E. The maximum flow rate and volume that will be diverted to irrigate the 36 acre historical place of use after this change is 2.01 CFS and 43.6 AF. This water right will be associated with Claim 40C 204985-00 as both water rights will be diverted into the same point of diversion. The maximum flow rate that may be diverted at this point of diversion with both water rights cannot exceed 2.45 CFS.

This change will be subject to the following measurement condition:

MEASUREMENT CONDITION

The Appropriator shall install a measuring device in the conveyance facility as near as practical to the pumpsite, in order to measure appropriations. The type and location of the device must be approved by the Department. The Appropriator shall keep a written record of the flow rate and volume of water diverted, including the period of time of diversion. Records must account separately for any appropriations under this authorization from appropriations under any other water right using the same diversion works and conveyance facility. Records shall be submitted by December 31 of each year and upon request at other times during the year. Failure to submit reports as required by these conditions may be cause for revocation of the change. The records must be sent to the Lewistown Water Resources Regional Office. The Appropriator shall maintain the measuring/monitoring device so it always operates properly and measures flow rate accurately during periods of appropriation.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the Application with such conditions as the Department decides necessary to satisfy the applicable criteria. E.g., §§ 85-2-310, -312, MCA.

DATED this 15th day of March 2022.

/Original signed by Steven Hamilton/
Steven Hamilton, Regional Manager
Lewistown Regional Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 15th day of March 2022, by first class United States mail.

Montana State Board of Land Commissioners
PO Box 201601
Helena, MT 59620-1601

Mike Goffena
331 Allen Road
Roundup, MT 59072

Lewistown Regional Office, (406) 538-7459